

IN THE SPECIFICATION:

ON PAGE 1, INSERT AS THE FIRST SENTENCE:

This is a continuation of application serial no. 10/093,880 filed on 03/08/2002, now U.S.

Pat. No. 6,824,676.

PAP
2/6/08

11

ON PAGE A, THE SECTION BEGINNING ON LINE 1 TO LINE 13 IS REPLACED WITH:

and fed to a smaller stripping column reactor 20 containing a bed 22 of hydrogenation catalyst in the form of a distillation structure. Hydrogen is fed to this reactor via flow line 107. The remaining diolefins in the fraction are hydrogenated to form mono olefins which are removed with the bottoms in flow line 108. Lighter products are returned to the first distillation reactor 10 as a vapor via flow line 106. The bottoms in flow line 108 are fed to thiophene reactor 40 where the final desired sulfur level is achieved. To keep the catalyst wetted and enhance performance a low sulfur content, low olefin heavy oil such as gas oil, diesel or heavy gasoline is fed via flow line 110. The heavy oil does not vaporize at the temrperature temperature within the reactor but absorbs absorbs much of the exothermic heat of reaction and thus the temperature gradient is reduced and dilutes the olefins in the feed. Optionally the catalyst bed 22 may be omitted. As another option the entire side draw may be fed directly to thiophene reactor 40.